IN THE CLAIMS:

1. (Currently Amended) A network device for use in a computer network carrying network traffic, the ~~intermediate~~ network device comprising:

a traffic scheduler having one or more resources for use in forwarding network traffic received at the device at different rates;

a classification engine configured to identify received network traffic based upon predefined criteria; and

a resource reservation engine in communicating relationship with the traffic scheduler and the classification engine,

wherein, in response to a first request to reserve resources for a given traffic flow, the resource reservation engine allocates one or more resources to the given traffic flow, but does not make the one or more allocated resources available to the given traffic flow.

2. (Previously presented) The network device of claim 1 wherein, in response to a second request to reserve resources, the resource reservation engine makes the one or more previously allocated resources available to the given traffic flow.

3. (Cancelled)

4. (Cancelled)

5. (Previously presented) The network device of claim 2 wherein:

the resource reservation engine utilizes a modified Resource reSerVation Protocol (RSVP) specification standard, and

the first and second reservation requests are modified RSVP Reservation (Resv) messages.

1   6. (Previously presented) The network device of claim 5 wherein:

2   the first and second modified Resv messages each include a two phase reservation

3   flag,

4   in the first modified Resv message, the two phase reservation flag is asserted, and

5   in the second modified Resv message, the two phase reservation flag is deas-

6   serted.

1   7. (Cancelled)

1   8. (Previously presented) The network device of claim 2 wherein packets corre-

2   sponding to the given traffic flow are forwarded by the device in a best efforts manner

3   after receipt of the first request and prior to receipt of the second request.

1   9. (Previously presented) The network device of claim 8 wherein packets corre-

2   sponding to the given traffic flow are forwarded with the one or more allocated resources

3   after receipt of the second request.

1   10. (Original) In a computer network having a plurality of entities interconnected

2   by a plurality of intermediate network devices having one or more resources for use in

3   forwarding network traffic, a method for providing end-to-end resource reservations

4   along a route between two or more entities, the method comprising the steps of:

5   receiving a first resource reservation message at a given intermediate network de-

6   vice disposed along the network route, the first resource reservation message identifying

7   a traffic flow between the two or more entities and requesting a reservation of resources;

8   in response to receiving the first resource reservation message, allocating one or

9   more of the device's resources for use in forwarding network traffic between the two or

10   more entities; and

11   withholding the allocated resources from being applied to the traffic flow between

12   the two or more entities.

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1   11. (Original) The method of claim 10 further comprising the step of:

2   receiving a second resource reservation message for the traffic flow between the

3   two or more entities; and

4   in response to receiving the second resource reservation message, making the al-

5   located resources available for use in forwarding the traffic flow between the two or more

6   entities.

1   12. (Cancelled)

1   13. (Previously presented) The method of claim 11 wherein the first and second

2   resource reservation messages are modified Resource reSerVation Protocol (RSVP) Res-

3   ervation (Resv) messages.

1   14. (Cancelled)

1   15. (Previously presented) The method of claim 11 wherein the steps of allocating

2   resources, withholding resources and making allocated resources available are performed

3   at each intermediate network device disposed along the route between the two or more

4   entities.

1   16. (Original) A method for providing resource reservations along a route through

2   a computer network between two or more entities, the method comprising the steps of:

3   generating a first resource reservation message identifying a traffic flow and re-

4   questing a reservation of resources;

5   configuring the first resource message to include a two phase reservation flag; and

6   asserting the two phase reservation flag so that resources within the network will

7   be allocated, but not made available to the identified traffic flow.

1   17. (Previously presented) The method of claim 16 further comprising the steps

2 of:

3   generating a second resource reservation message identifying the traffic flow;

4   configuring the second resource message to include a two phase reservation flag;

5 and

6   deasserting the two phase reservation flag so that the allocated resources are made

7 available for application to the identified traffic flow.

1   18. (Previously presented) The network device of claim 2, further comprising:

2   a timer to measure a predetermined time period, wherein the resource reservation

3 engine discards the resources if the second reservation message is not received prior to

4 expiration of the predetermined time period.

1   19. (Previously presented) A router, comprising:

2   means for receiving a first resource reservation message, the first resource reser-

3 vation message identifying a traffic flow between two or more entities requesting a reser-

4 vation of resources;

5   means for allocating, in response to the first resource reservation message, one or

6 more of the router's resources for use in forwarding network traffic between the two or

7 more entities, but not making available the one or more router's resources to the identi-

8 fied traffic flow;

9   means for receiving a second resource reservation message; and

10   means for making available, in response to the second resource reservation mes-

11 sage, the one or more router's resources to the identified traffic flow.

1   20. (Previously presented) A computer readable media, comprising:

2   the computer readable media having information written thereon, the information

3 having instructions for execution on a processor for the practice of a method for operating

4 a router, the method having the steps of,

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5   receiving a first resource reservation message, the first resource reservation mes-

6   sage identifying a traffic flow between two or more entities requesting a reservation of

7   resources;

8   allocating, in response to the first resource reservation message, one or more of

9   the router's resources for use in forwarding network traffic between the two or more enti-

10   ties, but not making available the one or more router's resources to the identified traffic

11   flow;

12   receiving a second resource reservation message; and

13   making available, in response to the second resource reservation message, the one

14   or more router's resources to the identified traffic flow.

1   21. (Previously presented) A method for operating a router, comprising:

2   generating a first resource reservation message identifying a traffic flow for which

3   a resource reservation is requested along a network path between two entities; and

4   indicating by the first resource reservation message that resources within the net-

5   work are requested to be allocated, but not made available to the identified traffic flow.

1   22. (Previously presented) The method of claim 21 further comprising:

2   generating a second resource reservation message identifying the traffic flow; and

3   indicating by the second resource reservation message that the allocated resources

4   are to be made available for application to the identified traffic flow.

1   23. (Previously presented) The method of claim 22 further comprising:

2   discarding the resources upon expiration of a predetermined time period, if the

3   second reservation message is not received prior to expiration of the predetermined time

4   period.

1   24. (Previously presented) A router, comprising:

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2   means for generating a first resource reservation message identifying a traffic

3   flow for which a resource reservation is requested along a network path between two en-

4   tities; and

5   means for indicating by the first resource reservation message that resources

6   within the network are requested to be allocated, but not made available to the identified

7   traffic flow.

1   25. (Previously presented) The router of claim 24 further comprising:

2   means for generating a second resource reservation message identifying the traffic

3   flow; and

4   means for indicating by the second resource reservation message that the allo-

5   cated resources are to be made available for application to the identified traffic flow.

1   26. (Previously presented) The router of claim 25 further comprising:

2   means for discarding the resources upon expiration of a predetermined time pe-

3   riod, if the second reservation message is not received prior to expiration of the prede-

4   termined time period.

1   27. (Previously presented) A computer readable media, comprising:

2   the computer readable media having information written thereon, the information

3   having instructions for execution on a processor for the practice of a method for provid-

4   ing resource reservations along a route between two or more entities, the method having

5   the steps of,

6   generating a first resource reservation message identifying a traffic flow to re-

7   quest a reservation of resources in a network between two or more entities; and

8   indicating by the first resource reservation message that resources within the net-

9   work will be allocated, but not made available to the identified traffic flow.

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1   28. (Currently amended) A system to establish a voice connection through a com-

2   puter network, comprising:

3   a destination ~~source~~ voice agent to send a first resource reservation message indi-

4   cating an address of a source ~~destination~~ voice agent;

5   a first router receiving the first resource reservation message, the first router de-

6   termining a first hop of a route to the destination voice agent;

7   a plurality of intermediate routers to establish a path through the network between

8   ~~from~~ the source voice agent and ~~to~~ the destination voice agent; and

9   a last router connected to a destination voice agent, wherein

10   the first router, the plurality of intermediate routers, and the last router, in re-

11   sponse to the first resource reservation message, allocate resources to a traffic flow from

12   the source voice agent to the destination voice agent, but do not make available the re-

13   sources to the traffic flow, and

14   ~~wherein~~ the destination voice agent transmits a second resource reservation mes-

15   sage to the source voice agent, the second resource reservation message making available

16   the allocated resources to the traffic flow.

1   29. (Currently amended) The system of claim 28 further comprising:

2   a timer, the timer configured to measure a predetermined time period, wherein

3   upon expiration of the predetermined time period, the resources are discarded if the sec-

4   ond resource reservation message is not received prior to expiration of the predetermined

5   time period.

1   30. (Currently amended) The system of claim 28 wherein the destination voice

2   agent, ~~in response to receiving the first resource reservation message,~~ transmits the sec-

3   ond resource reservation message in response to a called party picking up a destination

4   telephone.

1   31. (Currently amended) A method for establishing a voice connection through a

2   computer network, comprising:

3   sending, by a destination ~~source~~ voice agent, a first resource reservation message

4   indicating an address of a source destination voice agent;

5   receiving, by a first router, the first resource reservation message, the first router

6   determining a first hop of a route to the destination voice agent;

7   establishing, by a plurality of intermediate routers, a path between ~~from~~ the source

8   voice agent and ~~to~~ the destination voice agent, the path passing through the plurality of

9   intermediate routers; and

10   connecting a last router to a destination voice agent, wherein

11   the first router, the plurality of intermediate routers, and the last router, in re-

12   sponse to the first resource reservation message, allocate resources to a traffic flow from

13   the source voice agent to the destination voice agent, but do not make available the re-

14   sources to the traffic flow, and

15   ~~wherein~~ the destination voice agent transmits a second resource reservation mes-

16   sage to the source voice agent, the second resource reservation message making available

17   the allocated resources to the traffic flow.

18   32. (Previously presented) The method of claim 31 further comprising:

19   discarding the resources upon expiration of a predetermined time period, if the

20   second reservation message is not received prior to expiration of the predetermined time

21   period.

1   33. (Canceled)

1   34. (Previously presented) The method of claim 31 further comprising:

2   transmitting, by the destination voice agent in response to a called party picking

3   up a destination telephone, the second resource reservation message.

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1   35. (Currently amended) A system to establish a voice connection through a com-

2   puter network, comprising:

3   means for sending, by a <u>destination</u> ~~source~~ voice agent, a first resource reservation

4   message indicating an address of a <u>source</u> ~~destination~~ voice agent;

5   means for receiving, by a first router, the first resource reservation message, the

6   first router determining a first hop of a route to the destination voice agent;

7   means for establishing, by a plurality of intermediate routers, a path from the

8   source voice agent to the destination voice agent, the path passing through the plurality of

9   intermediate routers; <u>and</u>

10   means for connecting a last router to a destination voice agent, wherein

11   the first router, the plurality of intermediate routers, <u>and</u> the last router, in re-

12   sponse to the first resource reservation message, allocate resources to a traffic flow from

13   the source voice agent to the destination voice agent, but do not make available the re-

14   sources to the traffic flow, <u>and</u>

15   ~~wherein~~ the destination voice agent transmits a second resource reservation mes-

16   sage to the source voice agent, the second resource reservation message making available

17   <u>the allocated</u> resources to the traffic flow.

1   36. (Previously presented) The system of claim 35 further comprising:

2   means for discarding the resources upon expiration of a predetermined time pe-

3   riod, if the second reservation message is not received prior to expiration of the prede-

4   termined time period.

1   37. Canceled

1   38. (Currently amended) The system of claim 35 further comprising:

2   means for transmitting <u>the second resource reservation message</u>[,] ~~by the destina-~~

3   ~~tion voice agent~~ in response to a called party picking up a destination telephone~~, the sec-~~

4   ~~ond resource reservation message~~.

1   39. (Currently amended) A computer readable media, comprising:

2   the computer readable media having information written thereon, the information

3   having instructions for execution on a processor for the practice of a method for estab-

4   lishing a voice connection through a computer network, the method having the steps of,

5   sending, by a <u>destination</u> ~~source~~ voice agent, a first resource reservation message

6   indicating an address of a <u>source</u> ~~destination~~ voice agent;

7   receiving, by a first router, the first resource reservation message, the first router

8   determining a first hop of a route to the destination voice agent;

9   establishing, by a plurality of intermediate routers, a path <u>between</u> ~~from~~ the source

10   voice agent <u>and</u> ~~to~~ the destination voice agent, the path passing through the plurality of

11   intermediate routers; <u>and</u>

12   connecting a last router to a destination voice agent, wherein

13   the first router, the plurality of intermediate routers, <u>and</u> the last router, in re-

14   sponse to the first resource reservation message, allocating resources to a traffic flow

15   from the source voice agent to the destination voice agent, but do not make available the

16   resources to the traffic flow, and

17   transmitting, by the destination voice agent, a second resource reservation mes-

18   sage to the source voice agent, the second resource reservation message making available

19   <u>the allocated</u> resources to the traffic flow.